

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A molten-salt catalyst for purifying particulate materials, which are contained in an exhaust gas emitted from an internal combustion engine for an automobile and contain carbon, and said catalyst comprising:

a solid support; and

a catalytic ingredient loaded on the solid support including at least one member selected from the group consisting of silver nitrate, alkali metal nitrate, alkaline-earth metal nitrate and rare-earth nitrate,

wherein said catalytic ingredient further includes an oxidation facilitating ingredient.

2. (Previously Presented) The molten-salt catalyst according to claim 1, wherein said solid support is a basic support.

3. (Previously Presented) The molten-salt catalyst according to claim 1, wherein said catalytic ingredient includes alkali metal nitrate.

4. -15 (Cancelled)

16. (Previously Presented) The molten-salt catalyst according to claim 1, wherein a loading amount of said catalytic ingredient falls in a range of from 1 to less than 120 parts by weight with respect to 100 parts by weight of said solid support.

17. (Currently Amended) The molten-salt catalyst according to claim 4 claim 1, wherein said oxidation facilitating ingredient is at least one member selected from the group consisting of noble metal and oxide.

18. (Previously Presented) The molten-salt catalyst according to claim 17, wherein said noble metal is at least one member selected from the group consisting of Pt, Pd and Rh.

19. (Previously Presented) The molten-salt catalyst according to claim 17, wherein said oxide is at least one member selected from the group consisting of CeO₂, ZrO₂, CeO₂-

ZrO₂ solid solutions, BaO, CaO, V₂O₅, ZnO, WO₃, MoO₃, NiO, FeO, Fe₃O₄, Fe₂O₃, MnO₂, Cr₂O₃, CuO, CoO and Co₃O₄.

20. (Previously Presented) The molten-salt catalyst according to claim 17, wherein a loading amount of said noble metal falls in a range of from 0.1 to 10 parts by weight with respect to 100 parts by weight of said solid support.

21. (Previously Presented) The molten-salt catalyst according to claim 17, wherein a loading amount of said metal oxide falls in a range of from 1 to 50 parts by weight with respect to 100 parts by weight of said solid support.

22. (New) A molten-salt catalyst for purifying particulate materials, which are contained in an exhaust gas emitted from an internal combustion engine for an automobile and contain carbon, and said catalyst comprising:

a solid support; and

a catalytic ingredient loaded on the solid support wherein said catalytic ingredient is a composite nitrate including at least one member selected from the group consisting of silver nitrate, alkali metal nitrate, alkaline-earth metal nitrate and rare-earth nitrate.

23. (New) The molten-salt catalyst according to claim 22, wherein said solid support is a basic support.

24. (New) The molten-salt catalyst according to claim 22, wherein said catalytic ingredient includes alkali metal nitrate.

25. (New) The molten-salt catalyst according to claim 22, wherein said solid support includes at least one member selected from the group consisting of alumina, zirconia, titania, silica and zeolite.

26. (New) The molten-salt catalyst according to claim 23, wherein said basic support includes at least one member selected from the group consisting of magnesia spinel, zirconia,

alkali metal oxide, alkaline-earth metal oxide and rare-earth oxide.

27. (New) The molten-salt catalyst according to claim 22, wherein said alkali metal nitrate is at least one member selected from the group consisting of KNO_3 , CsNO_3 , NaNO_3 and LiNO_3 .

28. (New) The molten-salt catalyst according to claim 22, wherein said composite nitrate is at least one member selected from the group consisting of $\text{AgNO}_3\text{-CsNO}_3$, $\text{CsNO}_3\text{-KNO}_3$, $\text{CsNO}_3\text{-NaNO}_3$, $\text{CsNO}_3\text{-LiNO}_3$, $\text{KNO}_3\text{-Mg}(\text{NO}_3)_2$, $\text{LiNO}_3\text{-NaNO}_3$, $\text{NaNO}_3\text{-Ca}(\text{NO}_3)_2$, $\text{NaNO}_3\text{-Mg}(\text{NO}_3)_2$, $\text{AgNO}_3\text{-KNO}_3\text{-NaNO}_3$, $\text{AgNO}_3\text{-NaNO}_3\text{-Ba}(\text{NO}_3)_2$, $\text{KNO}_3\text{-LiNO}_3\text{-NaNO}_3$, $\text{KNO}_3\text{-NaNO}_3\text{-Mg}(\text{NO}_3)_2$, $\text{KNO}_3\text{-Ba}(\text{NO}_3)_2\text{-Ca}(\text{NO}_3)_2$, $\text{KNO}_3\text{-Ba}(\text{NO}_3)_2\text{-Sr}(\text{NO}_3)_2$, $\text{KNO}_3\text{-Ca}(\text{NO}_3)_2\text{-Sr}(\text{NO}_3)_2$, $\text{LiNO}_3\text{-NaNO}_3\text{-Ca}(\text{NO}_3)_2$, $\text{NaNO}_3\text{-Ca}(\text{NO}_3)_2\text{-Mg}(\text{NO}_3)_2$, $\text{NaNO}_3\text{-Ca}(\text{NO}_3)_2\text{-Sr}(\text{NO}_3)_2$ and $\text{KNO}_3\text{-NaNO}_3\text{-Ca}(\text{NO}_3)_2\text{-Mg}(\text{NO}_3)_2$.

29. (New) The molten-salt catalyst according to claim 28, wherein said alkali metal nitrate includes LiNO_3 at least.

30. (New) The molten-salt catalyst according to claim 22, wherein a loading amount of said catalytic ingredient falls in a range of from 1 to less than 120 parts by weight with respect to 100 parts by weight of said solid support.

31. (New) A molten-salt catalyst for purifying particulate materials, which are contained in an exhaust gas emitted from an internal combustion engine for an automobile and contain carbon, and said catalyst comprising:

a solid support, wherein said solid support is selected from the group consisting of magnesia, lanthanum oxide, and neodymium oxide; and

a catalytic ingredient loaded on the solid support including at least one member selected from the group consisting of silver nitrate, alkali metal nitrate, alkaline-earth metal nitrate and rare-earth nitrate.

32. (New) A molten-salt catalyst for purifying particulate materials, which are contained in an exhaust gas emitted from an internal combustion engine for an automobile and contain carbon, and said catalyst comprising:

a solid support; and

a catalytic ingredient loaded on the solid support including at least one member selected from the group consisting of an alkaline-earth metal nitrate, wherein said alkaline-earth metal nitrate is at least one member selected from the group consisting of $\text{Ba}(\text{NO}_3)_2$, $\text{Sr}(\text{NO}_3)_2$, $\text{Ca}(\text{NO}_3)_2$ and $\text{Mg}(\text{NO}_3)_2$, and rare-earth nitrate, wherein said rare-earth nitrate is at least one member selected from the group consisting of $\text{Y}_2(\text{NO}_3)_3$, $\text{La}_2(\text{NO}_3)_3$, $\text{Nd}_2(\text{NO}_3)_3$ and $\text{Pr}_2(\text{NO}_3)_3$.

SUPPORT FOR THE AMENDMENTS

Claim 4-15 have been cancelled.

Claims 1 and 17 have been amended.

Claims 22-32 have been added.

The amendment of Claim 1 is supported by previously pending Claim 4. The amendment of Claim 17 is supported by the corresponding claim as previously pending.

Claims 22-30 are supported by previously pending Claims 1-21, where independent Claim 22 corresponds to Claim 1 having the additional limitations of Claim 12. Claim 31 is supported by previously pending Claims 1-21, where independent Claim 31 corresponds to Claim 1 having the additional limitations of Claims 2 and 6-8. Claim 32 is supported by previously pending Claims 1-21, where independent Claim 32 corresponds to Claim 1 having the additional limitations of Claims 10 and 11.

No new matter has been entered by the present amendment.